



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,359	09/24/2001	Yeong Jong Shin	K-262	6347
34610	7590	06/03/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			ENG, GEORGE	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,359

Applicant(s)

SHIN, YEONG JONG

Examiner

George Eng

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/12/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendment filed 11/23/2004.

Information Disclosure Statement

2. The information disclosure statement filed 1/12/2005 has been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (US PAT. 6,317,609 hereinafter Alperovich) in view of Widegren et al. (US PAT. 6,374,112 hereinafter Widegren) and Friman (US PAT. 6,061,566).

Regarding claim 1, Alperovich discloses a method for setting up a real time data call in a mobile communication system comprising the steps of setting up a call between an originating side mobile station (20a figure 4) and a termination side mobile station (20b, figure 4), transferring bearer information between an origination base station controller (23a, figure 4) and a termination base station controller (23b, figure 4) through the set up call to set up a bearer path

Art Unit: 2643

(440, figure 4) between the origination base station controller and termination base station controller using control paths between the origination BSC, the termination BSC, and a mobile switching center (14, figure 4) controlling the origination and termination BSCs, and transferring real time video data of at least one of the originating side mobile station and the termination side mobile station between the origination BSC and the termination BSC (col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26). Alperovich differs from the claimed invention in not specifically teaching to transfer the real time video data of at least one of the origination BSC and the termination BSC through the set up bearer path. However, Widegren teaches a flexible radio access and resource allocation to support different types of media communication including speech, video and data capable of transferring video data through an established bearer channel (col. 5 line 29 through col. 7 line 40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Agrawal in transferring the real time video data between the origination BSC and the termination BSC through the set up bearer path, as per teaching of Widegren, in order to flexibly provide a wide variety of mobile communication services and efficiently allocate resources to support those services. Furthermore, neither Alperovich nor Widegren specifically teaches to transfer real time video data through the set up bearer path without using traffic resources of the MSC. However, Friman teaches to avoid using traffic resource of the MSC by directly switching a network connection between two base stations, thereby decreasing the total delay of the transmission link (col. 5 lines 10-32 and col. 7 line 39 through col. 8 line 9). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Alperovich and Widegren in having transferring real time video data

Art Unit: 2643

through the set up bearer path without using traffic resources of the MSC, as per teaching of Friman, in order to decrease the total delay of the transmission link.

Regarding claim 2, Widegren teaches to set up the call comprising the steps of defining a new option for a real time video call related to a speech call and a data call, inputting a termination side number in the newly defined option to initiate a real time video data call and setting up origination and termination calls by the originating side and termination side mobile stations, the corresponding BSCs and the MSC (col. 9 lines 33-63 and col. 11 line 52 through col. 12 line 32).

Regarding claim 3, Alperovich discloses only the bearer path and a control path being set up during the call set up and wherein no other traffic path is set up (figure 4).

Regarding claim 4, Widegren discloses the originating base station controller and the designating base station controller defining a new service option for real time video data before the call is set up (col. 12 lines 33-62).

Regarding claim 5, Alperovich teaches to send a request from the MSC to the termination BSC for the termination number for a call, to set up a radio link between the termination BSC and the termination mobile station, and transferring bearer information of the termination BSC to the origination BSC, and transferring a response to the bearer information from the origination BSC to the termination BSC to form a bearer path (col. 5 lines 30-42).

Regarding claims 6-7, the examiner takes an Official notice that it is old and notoriously well known in the art of retransmitting bearing information, i.e., training information, and response signal, i.e., acknowledgement, between termination device and the origination device when the bearing information and the response signal are not transferred within a prescribed

period of time in order to secure training communication, wherein the retransmission is set to a prescribed number of time in order to limit the further attempts.

Regarding claims 8-9, Alperovich teaches the bearer information of the termination BSC comprising a bearer address of the terminal BSC and the response to the bearer information comprising a bearer address and synchronization information (col. 5 lines 15-42).

Regarding claims 10-12, Widegren teaches to clear the call and bearer path after the real time video data has been transferred comprising the steps of signaling to the core network service node, i.e., the MSC, to clear the bearer path, transferring a clear command from the core network service node to the origination and termination BSCs, and sending a message from each of the origination and termination BSCs to inform the core network service node of completing of the clearing, wherein the control path channel being used for communication between each of the origination and termination BSCs and the core network service node (col. 6 lines 34-67 and col. 7 lines 10-17).

Regarding claim 13, Widegren discloses the video data being transferred at a very high data rate between each of the origination and termination BSCs and the core network service node (col. 2 lines 35-48) so that one skill in the art would recognize the video data being transferred at a rate of at least 1 Mbps.

Regarding claim 14, Alperovich discloses a method for setting up a real time data call in a mobile communication system comprising the steps of setting up a call between an originating side mobile station (20a figure 4) and a termination side mobile station (20b, figure 4), transferring bearer information between an origination base station controller (23a, figure 4) and a termination base station controller (23b, figure 4) through the set up call to set up a bearer path

Art Unit: 2643

(440, figure 4) between the origination base station controller and termination base station controller using control paths between the origination BSC, the termination BSC, and a mobile switching center (14, figure 4) controlling the origination and termination BSCs, and transferring real time video data of at least one of the originating side mobile station and the termination side mobile station between the origination BSC and the termination BSC (col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26). Alperovich differs from the claimed invention in not specifically teaching the router coupled to form a direct bearer channel between the origination BSC and the termination BSC. However, Widegren teaches such (col. 5 line 29 through col. 7 line 40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Agrawal in having the router coupled to form a direct bearer channel between the origination BSC and the termination BSC, as per teaching of Widegren, in order to flexibly provide a wide variety of mobile communication services and efficiently allocate resources to support those services. Furthermore, neither Alperovich nor Widegren specifically teaches to transfer real time video data through the set up bearer path without using traffic resources of the MSC. However, Friman teaches to avoid using traffic resource of the MSC by directly switching a network connection between two base stations, thereby decreasing the total delay of the transmission link (col. 5 lines 10-32 and col. 7 line 39 through col. 8 line 9). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Alperovich and Widegren in having transferring real time video data through the set up bearer path without using traffic resources of the MSC, as per teaching of Friman, in order to decrease the total delay of the transmission link.

Regarding claim 15, the limitations of the claim are rejected as the same reasons set forth in claim 13.

Regarding claims 16-17, Alperovich discloses the at least one origination device comprising an origination mobile terminal (20a, figure 14) and at least one origination base station transceiver (23a, figure 4) configured to form a radio interface with the origination mobile terminal, and at least one termination device comprising a termination mobile terminal (20b, figure 11A) and at least one termination base station transceiver (23b, figure 4) configured to form a radio interface with the termination mobile terminal.

Regarding claim 19, Alperovich discloses the mobile communication system having a home location register (26b, figure 4) for storing position information and processing position information of plurality of mobile stations within the network (col. 5 lines 43-57).

Regarding claim 20, the limitations of the claim are rejected as the same reasons set forth in claim 1.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (US PAT. 6,317,609 hereinafter Alperovich) in view of Widegren et al. (US PAT. 6,374,112 hereinafter Widegren) and Friman (US PAT. 6,061,566) as applied in claim 14 above, and further in view of Rollender (US PAT. 6,493,553).

The combination of Alperovich, Widegren and Friman differs from the claimed invention in not specifically teaching the termination mobile terminal being identified by an international mobile subscription and wherein the least one origination device provides the IMSI to the router to establish the direct bearer channel to the termination mobile terminal. However, Rollender

Art Unit: 2643

teaches to use international mobile subscription identifier to identify mobile terminal, and to complete a call (col. 1 line 23 through col. 2 line 2), thereby providing a secure communication. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Alperovich, Widegren and Friman in having the termination mobile terminal being identified by an international mobile subscription and wherein the least one origination device provides the IMSI to the router to establish the direct bearer channel to the termination mobile terminal, as per teaching of Rollender, in order to provide a secure communication.

6. Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (US PAT. 6,317,609 hereinafter Alperovich) in view of Widegren et al. (US PAT. 6,374,112 hereinafter Widegren).

Regarding claim 21, Alperovich discloses a method for setting up a real time data call in a mobile communication system comprising the steps of setting up a call between an originating side mobile station (20a figure 4) and a termination side mobile station (20b, figure 4), transferring bearer information between an origination base station controller (23a, figure 4) and a termination base station controller (23b, figure 4) through the set up call to set up a bearer path (440, figure 4) between the origination base station controller and termination base station controller using control paths between the origination BSC, the termination BSC, and a mobile switching center (14, figure 4) controlling the origination and termination BSCs, and transferring real time video data of at least one of the originating side mobile station and the termination side mobile station between the origination BSC and the termination BSC (col. 5 line 57 through col.

Art Unit: 2643

9 line 32 and col. 13 line 4 through col. 15 line 26). In addition, Alperovich teaches to send a request from the MSC to the termination BSC for the termination number for a call, to set up a radio link between the termination BSC and the termination mobile station, and transferring bearer information of the termination BSC to the origination BSC, and transferring a response to the bearer information from the origination BSC to the termination BSC to form a bearer path (col. 5 lines 30-42). Alperovich differs from the claimed invention in not specifically teaching to transfer the real time video data of at least one of the origination BSC and the termination BSC through the set up bearer path. However, Widegren teaches a flexible radio access and resource allocation to support different types of media communication including speech, video and data capable of transferring video data through an established bearer channel (col. 5 line 29 through col. 7 line 40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Agrawal in transferring the real time video data between the origination BSC and the termination BSC through the set up bearer path, as per teaching of Widegren, in order to flexibly provide a wide variety of mobile communication services and efficiently allocate resources to support those services.

Regarding claims 22-23, the examiner takes an Official notice that it is old and notoriously well known in the art of retransmitting bearing information, i.e., training information, and response signal, i.e., acknowledgement, between termination device and the origination device when the bearing information and the response signal are not transferred within a prescribed period of time in order to secure training communication, wherein the retransmission is set to a prescribed number of time in order to limit the further attempts.

Regarding claims 24-25, Alperovich teaches the bearer information of the termination BSC comprising a bearer address of the terminal BSC and the response to the bearer information comprising a bearer address and synchronization information (col. 5 lines 15-42).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich et al. (US PAT. 6,317,609 hereinafter Alperovich) in view of Widegren et al. (US PAT. 6,374,112 hereinafter Widegren) and Rollender (US PAT. 6,493,553).

Regarding claim 26, Alperovich discloses a method for setting up a real time data call in a mobile communication system comprising the steps of setting up a call between an originating side mobile station (20a figure 4) and a termination side mobile station (20b, figure 4), transferring bearer information between an origination base station controller (23a, figure 4) and a termination base station controller (23b, figure 4) through the set up call to set up a bearer path (440, figure 4) between the origination base station controller and termination base station controller using control paths between the origination BSC, the termination BSC, and a mobile switching center (14, figure 4) controlling the origination and termination BSCs, and transferring real time video data of at least one of the originating side mobile station and the termination side mobile station between the origination BSC and the termination BSC (col. 5 line 57 through col. 9 line 32 and col. 13 line 4 through col. 15 line 26). Alperovich differs from the claimed invention in not specifically teaching the router coupled to form a direct bearer channel between the origination BSC and the termination BSC. However, Widegren teaches such (col. 5 line 29 through col. 7 line 40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Agrawal in having the router coupled to form a

Art Unit: 2643

direct bearer channel between the origination BSC and the termination BSC, as per teaching of Widegren, in order to flexibly provide a wide variety of mobile communication services and efficiently allocate resources to support those services. Furthermore, neither Alperovich nor Widegren specifically teaches the termination mobile terminal being identified by an international mobile subscription and wherein the least one origination device provides the IMSI to the router to establish the direct bearer channel to the termination mobile terminal. However, Rollender teaches to use international mobile subscription identifier to identify mobile terminal, and to complete a call (col. 1 line 23 through col. 2 line 2), thereby providing a secure communication. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Alperovich and Widegren in having the termination mobile terminal being identified by an international mobile subscription and wherein the least one origination device provides the IMSI to the router to establish the direct bearer channel to the termination mobile terminal, as per teaching of Rollender, in order to provide a secure communication.

Response to Arguments

8. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2643

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is (571) 272-7495. The examiner can normally be reached on Tue-Fri 7:30 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George Eng
Primary Examiner
Art Unit 2643